

IMPORTANT: IN ADDITION TO THESE PLANS (WHICH ALWAYS TAKE PRECEDENCE), YOU SHOULD HAVE THE FOLLOWING FROM ACT BUILDING SYSTEMS:

- CONSTRUCTION PACKAGE
- INSTALLATION MANUALS
- CONSTRUCTION VIDEOS

PLEASE CONTACT YOUR SALES REP IF YOU HAVE NOT RECEIVED THESE PRIOR TO STARTING CONSTRUCTION.

PROJECT DESIGN CRITERIA

ROOF DEAD LOAD: 5 psf
 ROOF COLLATERAL LOAD: 0 psf
 GROUND SNOW LOAD: 50 psf
 ROOF SNOW LOAD: 35 psf
 ROOF LIVE LOAD: 20 psf
 WIND SPEED: 150 mph
 WIND EXPOSURE: C
 Ss: 0.070 Sds: 0.075
 S1: 0.043 Sd1: 0.069
 SEISMIC DESIGN CATEGORY: A (for both periods)
 R transverse: 5.0 R longitudinal: 5.0
 RISK CATEGORY: II

Ct = 1.0

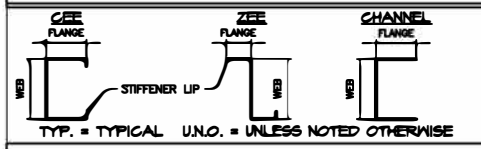
WIND DESIGN OF LATERAL FORCE-RESISTING SYSTEMS IS BASED ON THE DIRECTIONAL DESIGN PROCEDURE OF ASCE 7-10, CHAPTER 27.

SEISMIC DESIGN OF LATERAL FORCE-RESISTING SYSTEMS ARE AS FOLLOWS:

- TRANSVERSE: ORDINARY STEEL MOMENT FRAME (SEISMIC DESIGN IS BASED ON ASCE 07-10, SECTIONS 12.1 - 12.13)
- LONGITUDINAL: ORDINARY STEEL BRACED FRAME (SEISMIC DESIGN IS PERFORMED USING THE SIMPLIFIED DESIGN PROCEDURE (ASCE 07-10, SECTION 12.14).

DESIGN BASE SHEAR: IS SHOWN ON CALCULATION SHEET M2.

COMPONENT DIAGRAM



WALL OPENING SCHEDULE

DOOR	WIDTH	HEIGHT	OPENING TYPE	HEADER GIRT	OPENING JAMES
①	6'-0"	7'-0"	WINDOW	SINGLE	CHN4X 2X16
②	4'-0"	7'-0"	WINDOW	SINGLE	CHN4X 2X16
③-4	5'-0"	9'-0"	WINDOW	SEE NOTE #4	CHN4X 2X16
⑤-6	5'-0"	9'-0"	WINDOW	SINGLE	CHN4X 2X16
⑦-10	5'-0"	2'-0"	WINDOW	SEE NOTE #4	CHN4X 2X16

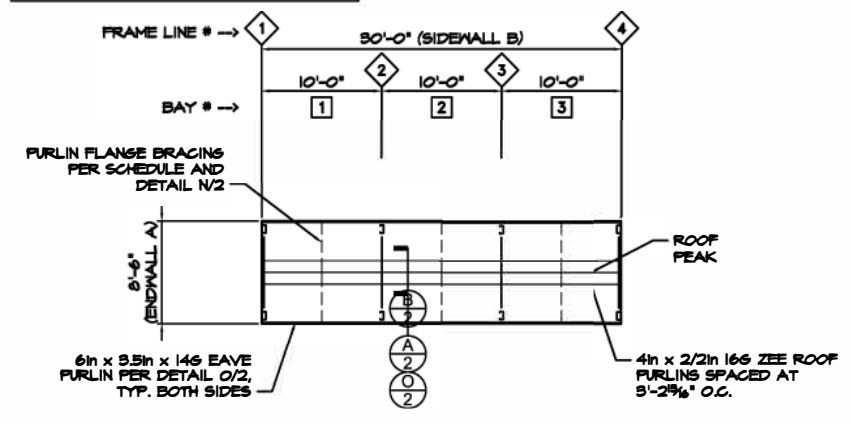
NOTES:

- 1) JAMB MEMBERS SHOWN AS 'CHN' ARE CHANNEL MEMBERS (WITHOUT STIFFENER LIPS). FIRST NUMBER IS WEB DEPTH IN INCHES, SECOND NUMBER IS FLANGE WIDTH IN INCHES, AND THIRD NUMBER IS MATERIAL THICKNESS (GAUGE).
- 2) SEE DETAILS J/2 AND K/2 FOR OPENING FRAMING INFORMATION.
- 3) SIZE OF HEADER GIRT MEMBER TO BE SAME AS SIDEWALL OR ENDWALL GIRT, AS APPROPRIATE, PER ELEVATIONS. AT WINDOWS, INSTALL HEADER GIRT SPECIFIED ABOVE AND BELOW WINDOWS, U.N.O.
- 4) AT OPENINGS NOTED, INSTEAD OF ATTACHING DOOR JAMES TO HEADER GIRT PER DETAIL L1/2 ATTACH DOOR JAMES TO UNDERSIDE OF MEZZANINE EDGE JOIST OR EAVE FURLIN PER DETAIL L2/2.
- 5) ALL OPENINGS AND ACCESSORIES SHALL BE CAPABLE OF SUPPORTING ALL WIND PRESSURES PERPENDICULAR TO THE SURFACE (GENERATED BY WINDS AT THE SPEED AND EXPOSURE INDICATED ABOVE) BY SPANNING BETWEEN THE JAMES.

DEFLECTION LIMITS

FURLINS:	L/150 (STD)
GIRTS:	L/90 (STD)
EA WIND COLUMNS:	L/120 (STD)
WALL PANEL:	L/60 (STD)

ROOF DIAPHRAGM NOTE
 ROOF SHEETING IS USED AS DIAPHRAGM TO BRACE THE BUILDING AND IS NOT TO BE CUT UNDER ANY CIRCUMSTANCES



6 ROOF FRAMING PLAN
 SCALE: 1/8" = 1'-0"

NOTE: STAIR DESIGN, MATERIALS, AND INSTALLATION TO BE PROVIDED BY OTHERS.

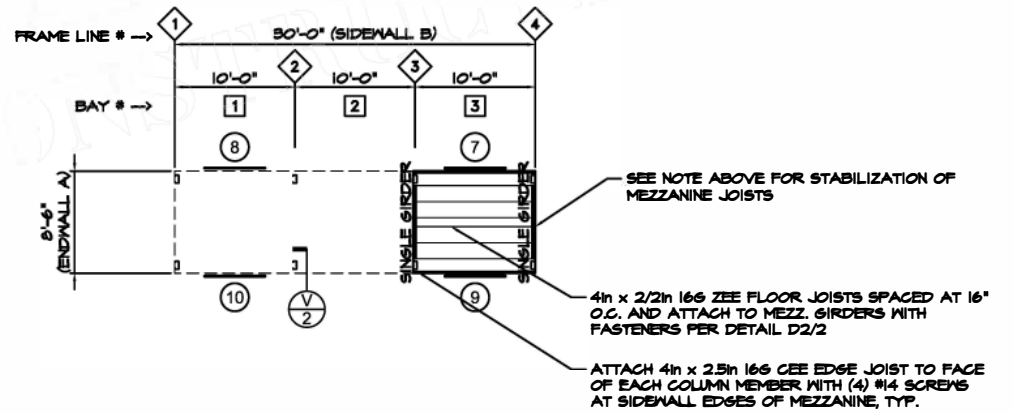
DESIGN, MATERIALS, AND INSTALLATION OF ALL GUARDRAILS OR WALLS AT EXPOSED EDGES OF MEZZANINE FLOOR TO BE PROVIDED BY OTHERS.

NOTE: SEE DETAIL T/2 FOR FLOOR FRAMING AROUND FLOOR OPENING FOR STAIRWAY. STAIR TO BE LOCATED BY CUSTOMER.

NOTE: INSTALL 5/4" 48/24 MIN. CDX PLYWOOD AT MEZZANINE FLOOR, ATTACH TO STEEL FRAMING WITH #10 MIN. SCREWS AT 6" O.C. AT PANEL EDGES, 12" O.C. IN FIELD. STAGGER ALL PLYWOOD JOINTS PARALLEL TO FLOOR JOISTS. SUPPORT ALL EDGES WITH JOIST MATERIAL OR USE PLYWOOD WITH TONGUE AND GROOVE EDGES.

MEZZANINE JOIST STABILIZATION:

- 1) NEAR CENTER OF BUILDING AT EACH MEZZANINE GIRDER, ATTACH MIN. 1.5" X 1.66" STRAP WITH (2) #10 SCREWS TO GIRDER ADJACENT TO ONE FLOOR JOIST, RUN STRAP UP AND OVER TOP OF A MIN. OF TWO JOISTS, THEN BACK DOWN TO GIRDER AT ADJACENT JOIST AND ATTACH STRAP WITH (2) #10 SCREWS TO MEZZANINE GIRDER. INSTALL #10 SCREW THRU STRAP INTO THE TOP OF EACH JOIST CROSSED.
- 2) INSTALL 4" X 2" (VERTICAL, HORIZ.) 166 ANGLE AT ENDS OF JOISTS (FULL WIDTH OF MEZZANINE) AT EDGES OF MEZZANINE FLOOR (2 PLACES) AND FASTEN TO TOP FLANGE OF FLOOR JOIST ENDS WITH #10 SCREW INTO EACH JOIST.



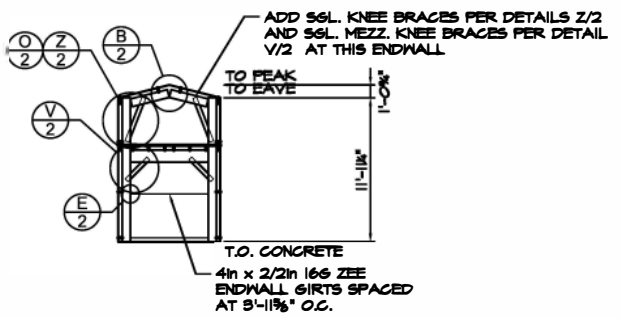
7 MEZZANINE FLOOR FRAMING PLAN
 SCALE: 1/8" = 1'-0"

NOTE: DESIGN OF CONCRETE FOUNDATION TO SUPPORT BUILDING SHOWN IS TO BE PROVIDED BY OTHERS.

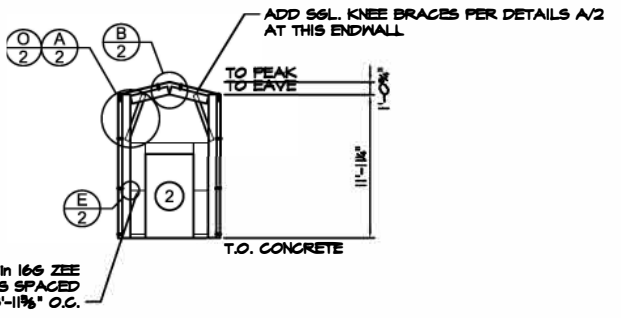
BRAND, TYPE, AND EMBEDMENT OF ANCHORAGE OF BUILDING COMPONENTS TO CONCRETE REFER TO COLUMN BASE DETAILS FOR ANCHOR LOCATIONS AND DIAMETER

NOTE: SEE 'FRAME CROSS-SECTION' DETAILS ON SHEET 2 FOR SPECIFIC FRAME DETAIL INFORMATION.

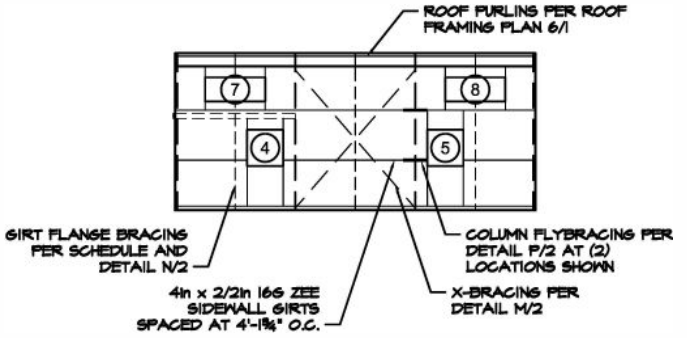
1 BUILDING LAYOUT PLAN
 SCALE: 1/8" = 1'-0"



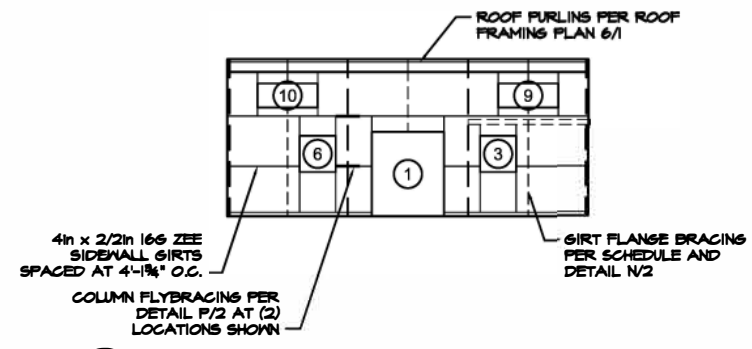
4 ENDWALL 'B' INTERIOR ELEVATION
 SCALE: 1/8" = 1'-0"



5 ENDWALL 'A' INTERIOR ELEVATION
 SCALE: 1/8" = 1'-0"



3 SIDEWALL 'B' EXTERIOR ELEVATION
 SCALE: 1/8" = 1'-0"



2 SIDEWALL 'A' EXTERIOR ELEVATION
 SCALE: 1/8" = 1'-0"

PRELIMINARY
 ONLY NOT FOR
 CONSTRUCTION

Distributor: Toro Steel Buildings
 Job Name: Toro Steel Buildings
 Job Address: 801 Broadway ave nw
 Grand Rapids, MI 49504

DRAWN: _____
 CHECKED: _____
 DATE: 6/18/2024
 JOB NO.: VNUJ97232763
 SHEET: 1 OF 1